

### **Clearing Permit Decision Report**

### 1. Application details

1. Application deta	ils					
1.1. Permit applica	tion details					
Permit application No.:	7324/1					
Permit type:	Purpos	Purpose Permit				
4.0 Dueu eu eu talet						
1.2. Proponent det		to Fundanction				
Proponent's name:	RIOTI	to Exploration				
1.3. Property detail	ls					
Property:	Explora	Exploration Licence 04/2295				
	Explora	Exploration Licence 04/2296				
Local Government Area:	Shire o	Shire of Derby-West Kimberley				
Colloquial name:	Yampi Exploration Project					
1.4. Application						
Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:			
22		Mechanical Removal	Mineral Exploration and Associated Activities			
	<b>.</b> . ,.		······································			
1.5. Decision on ap						
Decision on Permit Applic Decision Date:		Grant 15 December 2016				
Decision Date:	15 Dec	emper 2016				
2. Site Information						
2.1. Existing enviro	onment and in	formation				
2.1.1. Description of the	he native vege	tation under application				
Vegetation Description	Beard vegetatio	ard vegetation associations have been mapped for the whole of Western Australia. The clearing permit				
•		ication areas have been broadly mapped as the following Beard vegetation association (GIS Database):				
	60: Grasslands, tall bunch grass savanna woodland, grey box & cabbage gum over ribbon grass;					
	<ul> <li>736: Mosaic: Grasslands, curly spinifex, low tree savanna; snappy gum &amp; Eucalyptus perfoliata over Triodia pungens / Grasslands; sparse low tree savanna; Adansonia gregorii over Triodia bynoei;</li> <li>744: Grasslands, tall bunch grass savanna sparse low tree; Acacia suberosa &amp; bauhinia over mitchell &amp; ribbon/blue grass on black soil;</li> </ul>					
	773: Grasslands, high grass savanna low tree; bloodwood ( <i>Eucalyptus dichromoph</i> grass &/or upland tall grass; and		bloodwood (Eucalyptus dichromophloia) & grey box over white			
	8001: Grassland curley spinifex o		nna; bloodwood (Eucalyptus dichromophloia) & woolybutt over			
			over the application areas; therefore vegetation communities have any further detail than Beard vegetation mapping.			
Clearing Description	Rio Tinto Explo approximately 1	Yampi Exploration Project. Rio Tinto Exploration Pty Ltd proposes to clear up to 22 hectares of native vegetation within a total boundary of approximately 10,656 hectares, for the purpose of mineral exploration and associated activities. The project is located approximately 91 kilometres north of Derby, in the Shire of Derby-West Kimberley.				
Vegetation Condition	tation Condition Pristine: No obvious signs of disturbance (Keighery, 1994);					
	To:					
	Very Good: Veg	etation structure altered; obvio	us signs of disturbance (Keighery, 1994).			
Comment	The vegetation of	condition has been inferred from	n aerial imagery and classified using the Keighery (1994) scale.			
3. Assessment of a	pplication aga	ainst clearing principles				
(a) Native vegetation	on should not	be cleared if it comprise	es a high level of biological diversity.			
(a) Harre regetatio						

### **Comments** Proposal may be at variance to this Principle

The application area occurs within the Mitchell subregion of the North Kimberley Interim Biogeographic Regionalisation of Australia (IBRA) bioregion and the Mount Eliza subregion of the Central Kimberley IBRA

(GIS Database). The Mitchell subregion is characterised by Savannah woodland over high *Sorghum* grasses and hummock grasses on shallow sandy soils on outcropping Proterozoic siliceous sandstone strata and Savannah woodlands over high *Sorghum* grasses on red and yellow earths mantling basic Proterozoic volcanics. Riparian closed forests of *Melaleuca* and *Pandanus* occur along drainage lines. A prominent feature is the rugged sunken coastline with extensive Mangal occurring in estuaries and deep, sheltered embayments. Numerous small patches of monsoon rainforest are scattered through the district. This subregion features a high number of endemic flora and fauna species to subregion (CALM, 2002). The Mount Eliza subregion is characterised by very rugged with intense folding and exposure of basement strata. The geology includes shales, granites, sandstones, dolerites and volcanics. The vegetation is primarily savannah woodland and there are scattered vine thickets towards western end (CALM, 2002).

There has been no flora surveys conducted over the application areas. According to available databases there are no known records of Threatened Flora, Threatened Ecological Communities or Priority Ecological Communities within the application areas or within a 10 kilometre radius of the application areas (DPaW 2016; GIS Database). A search on available databases within a 10 kilometre radius of the application areas revealed four Priority flora species: *Cyperus victoriensis* (Priority 1), *Eragrostis petraea* (Priority 1), *Gardenia gardneri* (Priority 3) and *Olearia arguta var. arguta* (Priority 3) (DPaW, 2016). Given the lack of flora and vegetation surveys over application area and the broader region, the level of biological knowledge of the bioregions appears to be low and CALM (2002) states that there are a high number of endemic species to the subregions. Aerial imagery indicates that the vegetation appears to be largely in a pristine condition (Keighery, 1994). Potential impacts to Priority Flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition.

A search on NatureMap (DPaW, 2016) found that no weed species had been recorded within the application area or surrounding region. Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

Analysis of aerial imagery identified several potential broad fauna habitat types within the application area (GIS Database). Both are considered to be in 'very good' to 'pristine' condition (Keighery, 1994; GIS Database). Due to the remote location and lack of studies there is limited information on the faunal assemblages within the Mitchell and Mount Eliza subregions.

The shortage of biological survey data from the area brings a level of uncertainty when assessing the level of biological diversity of the application area. However, the broad-scale vegetation types and fauna habitat types are common and widespread both locally and regionally. Aerial imagery also suggests the widespread availability of similar vegetation communities and landforms, and the application area is not considered to support a higher biological diversity than the adjoining local or regional areas (GIS Database). Given the small area proposed to be cleared (22 hectares), it is not likely that the proposed clearing will have any significance on biodiversity at a regional scale.

Based on the above, the proposed clearing may be at variance to this Principle.

Methodology DPaW (2016)

GIS Database:

- Flora DRF Species Habitat
- IBRA Australia
- Imagery

# (b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.

#### Comments Proposal may be at variance to this Principle

No fauna surveys were undertaken over the application area. Analysis of aerial photography suggests the vegetation to be in 'very good' to 'pristine' condition (Keighery, 1994) and that fauna habitats of elevated significance may be present within the application area (GIS Database). Analysis of aerial imagery demonstrates that the local area remains largely uncleared and the vegetation communities and associated fauna habitats are considered common and widespread in the local area (GIS Database).

Numerous conservation significant fauna listed under the *Environment Protection and Biodiversity Conservation Act 1999* or protected under Western Australian legislation (*Wildlife Conservation Act, 1950*) may potentially occur within the application areas (DPaW, 2016). These include:

- Actitis hypoleucos (Common Sandpiper) (IA)
- Conilurus penicillatus subsp. penicillatus (Brush-tailed Rabbit-rat, Pakoomav) (VU)
- Dasyurus hallucatus (Northern Quoll) (EN)
- Erythrura gouldiae (Gouldian Finch) (Priority 4)
- Falco peregrinus (Peregrine Falcon) (OS)
- Haliaeetus leucogaster (White-bellied Sea-Eagle) (IA)
- Hipposideros stenotis (Northern Leaf nosed-bat) (Priority 2)
- Isoodon auratus subsp. auratus (Golden Bandicoot) (VU)

-	Macroderma	gigas	(Ghost	Bat)	(VU)	

- Merops ornatus Rainbow (Bee-eater) (IA)

- Numenius phaeopus (Whimbrel) (IA)
- Tringa nebularia Common (Greenshank) (IA)
- Rhinonicteris aurantia Orange (Leaf nosed-bat) (Priority 4)

The application area sits within the Yampi Defence Area which DoEE (2016) describe as containing a high concentration of small refugial habitats, range extension species and supports several fauna species that are listed as specially protected, threatened or having priority status in Western Australia.

The area proposed to be cleared is relatively small (22 hectares), spread over a large application area, and there are large amounts of uncleared vegetation within the Mitchell and Mount Eliza subregions. However, there is very little biological knowledge of the region. Only limited fauna information is available for these subregions due to a lack of fauna surveys being completed in the remote region. The conservation values of the application area in regards to fauna, in particular conservation significant species, are uncertain and cannot be fully understood until on-ground fauna surveys are conducted. Potential impacts to conservation significant fauna as a result of the proposed clearing may be minimised by the implementation of a fauna management condition.

Based on the above, the proposed clearing may be at variance to this Principle.

Methodology DoEE (2016) DPaW (2016)

> GIS Database: - Imagery

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

#### Comments Proposal is not likely to be at variance to this Principle

According to available databases, there are no known records of Threatened Flora within the application areas (GIS Database). A search of the Department of Parks and Wildlife's Threatened and Priority Flora databases identified no Threatened Flora species within the application area (DPaW, 2016).

CALM (2002) states that the Threatened Flora species *Eucalyptus mooreana* is found within the Mount Eliza subregion. Potential impacts to Threatened Flora as a result of the proposed clearing may be minimised by the implementation of a flora management condition

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology CALM (2002)

GIS Database:

- Threatened and Priority Flora List

- (d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.
- Comments Proposal is not likely to be at variance to this Principle A search of the available databases showed that there are no known Threatened Ecological Communities situated within 50 kilometres of the application area (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database: - Threatened Ecological Sites Buffered

# (e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

### Comments Proposal is not likely to be at variance to this Principle

The application areas fall within the Northern Kimberley and Central Kimberley IBRA bioregions (GIS Database). The vegetation within the application areas are recorded as:

60: Grasslands, tall bunch grass savanna woodland, grey box & cabbage gum over ribbon grass;

736: Mosaic: Grasslands, curly spinifex, low tree savanna; snappy gum & *Eucalyptus perfoliata* over *Triodia pungens /* Grasslands; sparse low tree savanna; *Adansonia gregorii* over *Triodia bynoei*;

744: Grasslands, tall bunch grass savanna sparse low tree; *Acacia suberosa* & *bauhinia* over mitchell & ribbon/blue grass on black soil;

773: Grasslands, high grass savanna low tree; bloodwood (*Eucalyptus dichromophloia*) & grey box over white grass &/or upland tall grass; and

8001: Grasslands, curly spinifex, low tree savanna; bloodwood (*Eucalyptus dichromophloia*) & woolybutt over curley spinifex on islands (GIS Database).

The above Beard vegetation associations retain approximately 85% or above of their pre-European extent at both the state and bioregion level (Government of Western Australia, 2015). The areas proposed to be cleared are not a significant remnant of native vegetation.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Government of Western Australia (2015)

GIS Database:

- IBRA Australia

- Pre-European Vegetation

### (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

#### Comments Proposal is at variance to this Principle

According to the available databases, several ephemeral watercourses intersect the application area, with flows likely to be restricted to the wet season following significant rainfall or cyclonic events (GIS Database). Aerial imagery shows thick vegetation lining several watercourses, and these vegetation types are likely to provide important habitat for fauna, as the vegetation can provide faunal habitat of a moderate range of microhabitats with logs, leaf litter and tree hollows (GIS Database). The proposed clearing is likely to have some impact to the riparian vegetation. Potential impacts to riparian vegetation may be minimised through the implementation of a vegetation management condition.

The proposed clearing of 22 hectares of native vegetation within a 10,656 hectare permit boundary is unlikely to result in any significant impact to any watercourse or wetland provided natural surface water flow patterns are not disturbed.

Based on the above, the proposed clearing is at variance to this Principle.

Methodology GIS Database:

- Hydrography, linear

- Imagery

# (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

#### Comments Proposal is not likely to be at variance to this Principle

According to the available datasets the application areas intersect the Burramundi, Fossil, Looingnin, Precipice and Richenda land systems (GIS Database).

The Burramundi land system consists of rocky rounded hills and undulating terrain, skeletal soils, spinifex and scattered low trees. Alluvial aprons and drainage floors support more attractive pastures and have minor susceptibility to erosion (Payne & Schoknecht, 2011).

The Fossil land system consists of extensive dark cracking clay plains formed on limestone deposits with grasslands. This land system has a generally low susceptibility to erosion, and is resilient and not prone to degradation unless grazing levels are excessive (Payne & Schoknecht, 2011).

The Looingnin land system consists of basalt mountains and hills, shallow stony red earths, and grassy grey box woodlands. This land system is not generally prone to degradation and erosion, unless grazing pressure is excessive (Payne & Schoknecht, 2011).

The Precipice land system consists of rocky mountainous sandstone country with narrow or restricted basalt valleys, low open eucalypt woodlands with curly spinifex. This land system is generally not susceptible to erosion (Payne & Schoknecht, 2011).

The Richenda land system consists of inaccessible mountainous country, open stunted woodlands with curly spinifex, and grassy woodlands. Much of the system consists of poorly accessible hills and steep slopes and drainage floors and some lower slopes are moderately to highly susceptible to erosion (Payne & Schoknecht, 2011).

Given that the area proposed to clear is relatively small (22 hectares within a large permit boundary) and the low impact nature of the proposed activities, it is unlikely that the proposed clearing will cause any appreciable land degradation.

The application area has an annual average evaporation rate that highly exceeds the annual average rainfall (BoM, 2016). Based on this information, surface flows during normal rainfall events are likely to be short lived and recharge to groundwater would be considered minimal. This would reduce the likelihood of salinity increasing as a result of the proposed clearing.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

#### Methodology BoM (2016) Payne & Schoknecht (2011)

GIS Database: - Landsystem Rangelands

### (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

#### Comments Proposal is not likely to be at variance to this Principle

The application areas occur within the Yampi Defence Area Environmentally Sensitive Area (Register of National Estate) managed by the Department of Defence (GIS Database).

DoEE (2016) describes this area as covering approximately 570,000 hectares in the Kimberley region. The diversity of landforms in the place and the resultant high concentration of small refugial habitats support a regionally rich vertebrate fauna and represent the most southerly known extant population of the nationally vulnerable golden-backed tree rat (*Mesembriomys macrurus*) and the most southerly record in the Kimberley of the sugar glider (*Petaurus breviceps*). The place is also an important zone of overlap between many northern and southern species and sub-species. This Reserve supports several fauna and flora species that are listed as specially protected, threatened or having priority status in Western Australia in addition to four fauna species that are nationally vulnerable and one nationally endangered.

Despite the area being on the Register of National Estate for natural values, it is considered that the proposed clearing is low impact and of a small scale and will not significantly impact on the environmental values of the area. Following the cessation of exploration activities and rehabilitation undertaken by the proponent, the proposed activities are not expected to significantly impact on the conservation values of the Yampi Defence Reserve.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology DoEE (2016)

# (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

#### Comments Proposal is not likely to be at variance to this Principle

The application areas are not located within a Public Drinking Water Source Area (GIS Database). The application areas are located within the proclaimed Canning-Kimberley groundwater area under the *Rights in Water and Irrigation Act 1914* (GIS Database). Any groundwater extraction and/or taking or diversion of surface water for the purposes other than domestic and/or stock watering is subject to licence by the Department of Water.

The annual evaporation rate exceeds the annual average rainfall for local area (BoM, 2016; GIS Database). Any surface water within the application areas are likely to only remain for short periods following significant rainfall events. The proposed clearing is not likely to cause deterioration in the quality of any surface water within or outside of the application area.

The application areas have a groundwater salinity that is marginal (500 to 1,000 milligrams/Litre Total Dissolved solids (TDS)) (GIS Database). With high annual evaporation rates and low annual rainfall, there is little recharge into regional groundwater. The proposed clearing is unlikely to further deteriorate the quality of underground water (GIS Database).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2016)

GIS Database: - Groundwater Salinity, Statewide

# (j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

#### Comments Proposal is not likely to be at variance to this Principle

The application areas are located within the Robinson River catchment area (GIS Database). Given the size of the area to be cleared (22 hectares) in relation to the size of the catchment area (252,850 hectares) (GIS Database), the proposed clearing is not likely to increase the potential of flooding on a local or catchment scale.

With an average annual rainfall of 691 millimetres and an average annual evaporation rate of between 2,400 and 2,800 millimetres there is likely to be little surface flow during normal seasonal rains (BoM, 2016). Whilst large rainfall events may result in flooding of the area, the proposed clearing is not likely to lead to an increase in incidence or intensity of flooding.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2016)

GIS Database:

- Hydrographic Catchments – Catchments

### Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

There is one Native Title claim over the areas under application (Department of Aboriginal Affairs, 2016). However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (Department of Aboriginal Affairs, 2016). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Environment Regulation, Department of Parks and Wildlife and the Department of Water, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

The clearing permit application was advertised on 7 November 2016 by the Department of Mines and Petroleum inviting submissions from the public. One submission was received stating no objection to the proposed clearing.

Methodology Department of Aboriginal Affairs (2016)

#### 4. References

BoM (2016) Climate Statistics for Australian Locations. A Search for Climate Statistics for Derby Aero, Australian Government Bureau of Meteorology. http://reg.bom.gov.au/climate/averages/tables/cw\_003032.shtml (Accessed 9 December 2016).

CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions. Department of Conservation and Land Management.

Department of Aboriginal Affairs (2016) Aboriginal Heritage Enquiry System. Government of Western Australia, http://maps.dia.wa.gov.au/AHIS2/. (Accessed 9 December 2016).

DoEE (2016) Australian Heritage Database. Department of the Environment and Energy,

http://www.environment.gov.au/heritage (viewed 9 December 2016).

DPaW (2016) NatureMap. Department of Parks and Wildlife, http://naturemap.dec.wa.gov.au (Accessed 9 December 2016). Government of Western Australia (2015) 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, Perth.

Payne and Schoknecht (2011) Land systems of the Kimberley Region, Western Australia Technical Bulletin No.98. Department of Agriculture and Food. December 2011.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

#### 5. Glossary

#### Acronyms:

ВоМ	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia
DAFWA	Department of Agriculture and Food, Western Australia
DEC	Department of Environment and Conservation, Western Australia (now DPaW and DER)

DEE DER	Department of the Environment and Energy, Australian Government Department of Environment Regulation, Western Australia
DMP	Department of Mines and Petroleum, Western Australia
DRF	Declared Rare Flora
DoE	Department of the Environment, Australian Government (now DEE)
DoW	Department of Water, Western Australia
DPaW	Department of Parks and Wildlife, Western Australia
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities (now DEE)
EPA	Environmental Protection Authority, Western Australia
EP Act	Environmental Protection Act 1986, Western Australia
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the
	World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	Rights in Water and Irrigation Act 1914, Western Australia
TEC	Threatened Ecological Community
	The action of Declegical Community

#### **Definitions:**

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{DPaW (2015) Conservation Codes for Western Australian Flora and Fauna. Department of Parks and Wildlife, Western Australia}:-

#### Threatened species:

Published as Specially Protected under the *Wildlife Conservation Act 1950*, listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

*Threatened fauna* is that subset of 'Specially Protected Fauna' declared to be 'likely to become extinct' pursuant to section 14(4) of the Wildlife Conservation Act.

*Threatened flora* is flora that has been declared to be 'likely to become extinct or is rare, or otherwise in need of special protection', pursuant to section 23F(2) of the Wildlife Conservation Act.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

#### CR Critically endangered species

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### EN Endangered species

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### VU Vulnerable species

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

#### EX Presumed extinct species

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

#### IA Migratory birds protected under an international agreement

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### CD Conservation dependent fauna

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the

*Wildlife Conservation Act 1950,* in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### OS Other specially protected fauna

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950,* in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

#### P Priority species

Species which are poorly known; or

Species that are adequately known, are rare but not threatened, and require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

#### P1 Priority One - Poorly-known species:

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

#### P2 Priority Two - Poorly-known species:

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

### P3 Priority Three - Poorly-known species:

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

#### P4 Priority Four - Rare, Near Threatened and other species in need of monitoring:

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.